

[Communicated to the Council
and the Members of the League.]

Official No. : **C.276.M.166.1936.VIII.**

Geneva, June 30th, 1936.

LEAGUE OF NATIONS

ORGANISATION FOR COMMUNICATIONS AND TRANSIT

**Documentary Material collected regarding
NATIONAL PUBLIC WORKS**

1. REPORT OF THE EXPERTS.
 2. PRELIMINARY STATEMENT PREPARED BY THE
SECRETARIAT.
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Series of League of Nations Publications
✓ VIII. TRANSIT 1936. VIII. 8.

DOCUMENTARY MATERIAL
COLLECTED REGARDING NATIONAL PUBLIC WORKS.

I. REPORT OF THE EXPERTS.

As stated in the introduction to the volume "National Public Works"¹ the enquiry on national public works was undertaken in consequence of a resolution adopted by the Council of the League of Nations at its seventy-sixth session and a report adopted by the Assembly at its fourteenth session. This enquiry has produced a very considerable volume of documentary material obtained from the Governments of thirty-eight countries, relating to the public works policy pursued in those countries. (See the above-mentioned document and its Addendum.)

The Assembly of the League of Nations at its sixteenth session (September 1935), after taking cognisance of the material collected, asked the Communications and Transit Organisation to have a detailed and systematic examination of that material made by experts in order to enable more detailed enquiries to be pursued in this connection later.

In pursuance of this Assembly decision, the Advisory and Technical Committee for Communications and Transit examined the question at its nineteenth session (November 1935) and adopted the following resolution on the subject :

" The Advisory and Technical Committee :

" Emphasises the importance of the enquiry undertaken by the Secretariat into the question of national public works;

" Highly appreciates the valuable co-operation of the Governments which have enabled the Secretariat, by the copious information they have supplied, to collect documentary material of the first importance in relation to public works completed, in course of execution or under consideration in a very large number of countries;

" Taking note of the report of the Second Committee to the Assembly at its sixteenth session on the question of national public works, and of the resolution adopted by the Assembly on the subject :

" Is of opinion that the examination of the documentary material by experts will undoubtedly prove of great value, since it will lead to conclusions of general interest;

" Decides accordingly to instruct its Chairman to organise such a study by a small number of specially qualified experts."

In accordance with this resolution of the Committee, its Chairman appointed the following three experts to undertake the examination in question :

M. B. DJOURITCHITCH, former Deputy Minister of Communications of Yugoslavia;
M. Silvain DREYFUS, Honorary President of the General Council of Roads and Bridges and of the High Council of Public Works of France;
M. F. L. SCHLINGEMANN, Chief Engineer, Director of the Netherlands " Rijkswaterstaat ".

¹ Document C.482.M.209.1934.VIII.

These Experts met at Geneva from June 20th to 23rd, 1936, and drew up the following report as a result of their examination. Their work was based, in particular, on the preliminary statement prepared by the Secretariat, which is attached to this report.

On the proposal of his colleagues, M. Silvain DREYFUS presided over the experts' discussions.

* * *

The Experts consider in the first place that the documentary material obtained is very interesting and instructive. The particulars supplied by the different Governments are, however, difficult to compare with one another, owing on the one hand to their necessarily somewhat wide scope, and on the other to the fact that the countries differ greatly in their structure, their economic situation, their customs and the character of their population. It is therefore not without some hesitation that a few fundamental principles of general value can be enunciated on the basis of this material. Further, it is difficult to formulate practical recommendations intended for all States, because the latter have rarely indicated the reasons for their action.

One of the points brought out by the enquiry is, however, that the majority of the Governments give a definitely favourable opinion as regards the influence of the execution of public works on economic recovery in their countries and on unemployment. In this connection, the Experts consider that, if it is desired to obtain a really satisfactory result, the work undertaken during periods of prosperity should be accelerated rather than slowed down in times of depression. It would, indeed, be desirable to prepare programmes of work in advance in such a way that the operations undertaken in times of depression may not be of an improvised character, which might have unfortunate results on the economic system as a whole. Moreover, the experts recognise that public works in themselves are not sufficient to remedy unemployment and to overcome the depression.

As regards the different aspects of the problems dealt with by the Governments in their replies, in accordance with the questionnaire sent to them, the Experts think it possible to lay down the following general considerations :

I. ADMINISTRATIVE METHODS.

In the first place, as regards the administrative methods employed, we find that the works are undertaken in most cases either on behalf and by order of the Governments, or by the regional and local administrations, which pay for them with or without State assistance. This assistance chiefly depends on the more or less pronounced national importance of the work to be carried out. Some States, moreover, exact a contribution from the local administrations in respect of certain works. In most cases, unemployment-relief works, owing to their scattered nature, are likely to be of special concern to the local bodies. In certain countries, the Governments intervene only if the local authorities undertake to give preference to work requiring a high proportion of labour, or to utilise material produced within the country, or to complete the works within a stated time.

Works are also undertaken by public establishments, concessionnaires of public services, or special bodies set up to combat unemployment. Lastly, the Experts note that official organs for the co-ordination and supervision of public works have been created, particularly when the State shares in the financing of the operations.

The works themselves are carried out either under contract or directly by the authorities. In both cases, special rules are sometimes laid down regarding the labour to be employed.

2. METHODS OF FINANCING.

As regards the financing of public works, we find that the capital employed for carrying them out is derived in most cases either from loans subscribed for out of private

savings or from the budget resources constituted by the current revenue of the communities. In addition, in several States, special funds constituted by means of specific taxes, subsidies or other financial devices have been created for the execution of certain public works.

3. ALLOCATION OF EXPENDITURE BETWEEN LABOUR AND OTHER COSTS.

As regards the question of the allocation of expenditure between labour on the one hand and materials and equipment on the other, the abundant information supplied by the Governments is of too diverse a character to permit of definite conclusions being formed. A further difficulty is the necessity of allowing for the considerable amount of labour which enters into the price of the materials and equipment, a factor that cannot easily be estimated.

4. OPINIONS OF THE GOVERNMENTS.

Lastly, as regards the opinions of the Governments concerning the effects of the works on a revival of economic and industrial activity, and on unemployment, it has been considered in certain countries that, when unemployment is widespread, the execution of public works is an imperative necessity and a duty on the part of the community, in order to find work for the unemployed. In some cases, public opinion has objected to money doles and has insisted on relief being given through work. In this connection, the Experts are of opinion that, in any case, only works which are either directly or indirectly productive or operations of recognised general utility should be undertaken. Such works should not be described as relief works, since it is only a question of carrying out at the most opportune moment operations which are fully justified in themselves.

Furthermore, the Experts recognise that precautions must be taken to obviate the drawbacks which might result from the professional disqualification of certain workers called upon to take part in such work.

Moreover, while the majority of the replies agree that the execution of public works exerts a favourable influence on economic and industrial activity, certain Governments consider that this influence has been uncertain in their countries, although they do not say what reasons have led them to this conclusion. Other Governments point out quite rightly that a revival of activity depends in the first place on the development of private enterprise, and in general on the economic policy pursued.

* * *

In concluding their report, the Experts wish to say that they have met with difficulties in their work owing to the fact that, apart from differences in presenting the material as between one country and another, the documentation supplied by a given country often showed appreciable differences in the methods employed and the manner of setting it out, according to the department the material came from. The Experts therefore wondered whether States could not endeavour to secure greater co-ordination in this sphere between their different administrations.

On the other hand, countries have found themselves obliged, owing to the depression, to adopt in certain circumstances methods different from those normally employed in carrying out public works, both from the administrative and technical point of view—particularly as regards the utilisation of the ordinary plant—and from the point of view of financing the work, particularly by drawing upon the resources of the social insurance funds. It would have been interesting to have more information on the reasons for these different methods and on the results obtained.

* * *

Lastly, the Experts consider that it would be useful for the present report and the preliminary statement attached to it to be communicated to the different Governments. The latter would thus be able to consider how far they could make use of the different solutions which have been adopted and of the observations set out above.

These observations might also be taken into consideration in defining more clearly the scope of the information required should it be decided to undertake any further enquiry into the question of national public works.

Geneva, June 23rd, 1936.

(Signed) S. DREYFUS.
B. DJOURITCHITCH.
F. L. SCHLINGEMANN.

II. PRELIMINARY STATEMENT PREPARED BY THE SECRETARIAT.

INTRODUCTION.

Purpose of the Statement.

This preliminary statement contains a comparative analysis of the documentary material obtained. Its sole purpose is to facilitate the Experts' task, which consists:

- (1) In examining the documentary material assembled;
- (2) In drawing the appropriate conclusions therefrom.

Method adopted.

In analysing the Governments' replies, we have omitted any description of the work proper as well as any comments on the figures and statistics concerning the operations mentioned. We have confined ourselves to discussing the information and considerations of general interest mentioned in points II, III, and IV of the questionnaire sent to the Governments (see Annex).

In cases in which the conclusions arising out of the examination of the replies differ according to the nature of the work, a distinction has been made between the different categories of work.

In the case of question II, for example, we have analysed the administrative methods adopted and any legislative provisions communicated in the different replies, taking all the different alternatives into consideration. The same procedure has been adopted for questions III and IV. As regards question V, we have briefly indicated the considerations set out by each Government in its reply, classifying them according to the various points mentioned in the text of the question.

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I. PRINCIPAL ADMINISTRATIVE METHODS FOLLOWED OR CONTEMPLATED FOR THE EXECUTION OF THE WORK, AND ANY LEGAL PROVISIONS RELATING TO SUCH WORK.

Union of South Africa.

All public works of common interest or public works concerning more provinces than one, or public works carried out for the requirements of the Central Administration, are executed by the different competent departments of the Central Government. This is so more particularly in the case of inter-provincial bridges, land improvement with a view to settlement, harbour works, forestry works, irrigation works, telegraphic and telephonic installations, wireless stations and buildings for Government Departments.

On the other hand, the provincial administrations are responsible for the building of roads, bridges and buildings in general in the provinces, though the Central Administration in such cases places its services, where required, at the disposal of the provincial authorities, at their request and on their behalf. Railway construction is under the direction or orders either of the central authorities or of resident engineers in the districts in question.

The construction of airports is also in the hands partly of the Central Administration and partly of the local authorities, or of the two in concert.

In the case of certain land improvement or reclamation undertakings, the farmers concerned are responsible for such part of the work as does not require the assistance of specialised technicians.

Electrification works are executed either by the local authorities or (*e.g.*, in the case of additional generating plant) by the Electricity Supply Commission.

Most of the above works are put up to public tender. Sometimes they are allotted by contract—*e.g.*, in the case of the supply of mechanical plant and equipment, electric and other fittings, etc.

In some cases, the works are carried out directly by the authorities—*e.g.*, in the case of certain railways, the construction of airports and irrigation works. For irrigation works, partly contract and piece-work have sometimes been instituted.

Further, in the case of the mandated territory of South West Africa, road and irrigation works have been executed by the Administration of the mandated territory.

Australia.

Commonwealth Works.

The competent departments of the Commonwealth Government carry out the necessary operations of building and engineering works for the Federal departments, together with all other public works in the Federal capital and in the States which relate solely to Federal undertakings, such as roads, bridges, water supplies, sewage schemes, electric plant, etc. Other works in connection with the campaign against unemployment are in the hands, either of the Federal Government alone, or of the Federal Government in co-operation with the Governments of the several States. Certain road-building undertakings are subsidised by the Federal Government and executed by the States.

The above works undertaken on behalf of the various Federal authorities are executed mainly under contract. The same is the case with the Commonwealth railways; but some of the work on these is carried out by the Government direct or on the mixed system—*i.e.*, the execution of the work properly speaking is left to the Government, while the material is supplied under contract.

Further, the big works in connection with the Murray River regulation have a character of their own. They are based on a special law and an agreement between the Commonwealth Government and the three States territorially concerned (New South Wales, Victoria and South Australia). The direct execution of the work rests with the authorities of these three States.

Works carried out by the Various States.

New South Wales.

Public works are carried out either by various departments or special organisations of the central authorities of the State on its behalf—*e.g.*, the works organised by the Unemployment Relief Council, forestry works, the building of main roads, irrigation and land improvement schemes, or by the regional or local authorities (or the two in concert), or by the central authority on behalf of the local authorities. Advances are also given in certain cases for private works, or works are carried out by the central authorities at the demand of the landowners concerned—*e.g.*, in connection with irrigation schemes.

The works are carried out either departmentally, or by the day-labour system, or by tender, or contract, or, lastly, by the "mixed" system.

Queensland.

Public works are carried out on behalf of the State or of the regional or local authorities, subsidies or advances being sometimes made by the State in the latter cases. The work is executed either departmentally or by contract.

Tasmania.

Public works are executed by the State either departmentally or by contract, or sometimes by local authority on behalf of the State.

South Australia.

Public works are, in general, executed by the State administration authorities, generally departmentally; but cases are frequent where they are allocated by tender or executed under the "mixed" system. In the case of road-building in particular, there is—in addition to the departmental method—a system of grants to local governing authorities who do the work under State control, mainly under petty contracts.

Western Australia.

Public works are for the most part executed under the direct authority of the Government. In some cases they are carried out under the direction of the local authorities subject to the supervision of Government organisations.

Victoria.

Important public works are carried out in every case by State departments, or on behalf of the State by various special commissions and boards entrusted by the Government with particular enterprises—*e.g.*, settlement work, roads and bridges, electrification, hydraulic works, and forestry. Public works of less importance are in general executed by the local authorities under Government supervision. In the case of roads, the actual execution is usually left to the municipalities, subject to the supervision of the State Roads Board. The Roads Board is also entrusted with the execution in Victoria of the works under the ten-year programme of the Federal Aid Roads Act, for which a subsidy is granted by the Commonwealth Government. Lastly, the Board is in receipt of grants from the State Government out of the Unemployment Relief Fund for the execution of special work in connection with the campaign against unemployment.

The various public works are carried out either departmentally or by contract or tender, or under the "mixed" system, according to the case and nature of the work.

Austria.

The majority of public works are carried out by order and for account of the different Federal Government authorities, more particularly in connection with bridges, aerodromes belonging to the Federation, work in connection with the postal, telegraphic and telephonic services, and work by the Austrian Federal Railways.

In the case of Federal roads, the work is done by the departments of the provincial governments under the supervision and at the expense of the Federal Government.

Lastly, aerodromes which are not the property of the Federation are erected by order and for account of the communes concerned.

The works are executed in the majority of cases by private enterprise and are allocated by tender; in the case of certain special works or works of minor importance, they are allocated by direct contract. Certain unimportant works are carried out directly by the authorities concerned.

Belgium.

The majority of public works are carried out on behalf and for account of the State and under its supervision. In the case of works on waterways, those which are ranked as "major works" are financed by a Special Major Works Fund established by the State, which acts under the authority and responsibility of the Ministry of Public Works. Other hydraulic works are carried out by the latter Ministry direct. All the hydraulic works in question are paid for by the State and carried out by public tender. The same is the case with work on the roads, all of which is done directly for account of the State and put up to public tender. Public buildings are erected for account of the various departments concerned.

In the case of electrical installations, there is Government intervention, first in connection with the grant of authority for the execution of works by individuals or companies, secondly in connection with declarations to the effect that the works are of public utility, and thirdly in connection with supervision of the completed installations.

Further, in the case of works for the long-distance supply of gas, the administration retains the supervision in its hands, and reserves the right to call for alterations where necessary, or even for the disallowing of installations already authorised.

United Kingdom.

In the ordinary way, public works are carried out by the central Government or by the local authorities. Works carried out on behalf of the public authorities include works in connection with land settlement, land drainage, rural water supply, fishery harbours, etc. In such cases the works have been, in general, actually carried out by the authority normally responsible for the service in question, either by direct labour, or by contract. Certain works were executed—especially during the years 1929-1931—on the basis of a special programme for providing work for the unemployed.

Further, the construction of dwellings for the purpose of putting an end to the evil of the slums has been subsidised; State aid has also been granted for certain less important work done by statutory companies.

Bulgaria.

The majority of public works are carried out on behalf of the central authorities (roads and bridges, and public buildings) or on behalf of the local authorities (tramways). The work is done either direct or under contract; in the case of public buildings, resort is always had to contract.

The Government also settles refugees with the aid of the "Agrarian Fund"; it has placed the necessary land at the disposal of the Fund for distribution.

Canada.

In addition to the ordinary works executed on behalf of the State by the various departments, the Federal Government has also undertaken, on its own initiative and under its supervision, a variety of public works for the relief of the unemployed, giving grants for the purpose to the National Defence Department, under the supervision of which the unemployment relief camps are operated. With the same object, the Federal Government has given direct grants (for a certain proportion of the amounts required)

and loans to provinces and municipalities under agreements concluded with the latter for the purpose of the execution of various public works.

The expenditure in question is voted under special unemployment relief acts, and the Government has also drawn for the same purpose on the Unemployment Relief Fund.

Certain of the works in question, in particular those in connection with the unemployed camps, have been carried out direct, but the ordinary procedure is by contract.

Chile.

Public works are in the ordinary course executed on behalf of the State through the intermediary and under the direct supervision of the competent departments, or by public tender, or by inclusive contracts, or in minor cases by contracts at prices quoted per unit. However, in times of crisis and with a view to combating unemployment, certain hydraulic and irrigation works and work on public buildings and road repairs are carried out direct under a system of employing labour by the day, the object being to find occupation for as large a number as possible of workers, thus avoiding the use of machinery.

China.

Railway construction is undertaken, according to the case and the class of line, by the central Government, by local governments, by private companies or by individual owners of mines, etc.

In the case of the various hydraulic works, the central Government acts through the National Economic Council and the technical organisations of the latter, either doing the work direct—this is the least-frequent case—or by lending its technical and financial assistance to the other organisations, especially the various River Commissions (Yangtse-Kiang, Yellow River, Hwai-Ho, North China rivers), which do the necessary preparatory work and also in certain cases execute the work, in co-operation more particularly with the provincial authorities and organisations, except where the execution is left entirely to the latter.

Further, in the event of exceptional floods, a special Relief Commission is generally appointed; and this, amongst other things, carries out the necessary initial work (at the cost of the central Government) for the repair or construction of dykes, or gives subsidies for the purpose to local organisations. The final permanent work is then done by the National Economic Council itself.

Czechoslovakia.

The majority of the works, and especially works in connection with inland waterways, harbours, hydro-electric power stations, airports, telegraphs, telephones and broadcasting, and lastly the State railways, are carried out by the State.

In the case of private railway lines, the works are carried out on behalf of the undertakings themselves.

The construction of national roads is undertaken by the Government authorities, and of other roads by autonomous bodies.

Work in connection with agricultural improvements and development enterprises is carried out by the departments, communes or syndicates with the help of a grant from the State and the provinces. Similar grants are also made for works in connection with drinking-water supplies and sewage disposal, which are carried out by the communes.

Electrification works are carried out by the electric companies, with the assistance of the State and local authorities.

Lastly, public buildings are constructed by the State or by autonomous syndicates. These various works, and particularly those which are of some importance, are usually carried out by contract; in the case of public buildings, tenders are invited. Lastly, in certain cases, when the works are of less importance, they are carried out directly by the authorities.

Denmark.

Work on the railways is done on behalf of the State, usually under contract.

Work on bridges and roads and hydraulic construction (including the drainage of polders) is carried out under the direction of the competent Government departments, either by the State itself or by the local authorities or private organisations. The whole or part of the work is at the cost of the State, whether the work is done under contract or departmentally.

Further, public works in connection with the campaign against unemployment may be undertaken either by the State or by the communes or private institutions subsidised by the State. The State has also powers to subsidise certain special works, the object of which is to give occupation to young persons without employment.

Egypt.

The road works are undertaken by the Government and the bridge works on behalf of the Government or municipalities.

Hydraulic works are carried out by the competent department on behalf of the central State authority by means of contracts awarded to local or international firms. Works in connection with the post, telegraph and telephone services are carried out either by the Government or by private firms under Government contract.

Estonia.

The works for the relief of unemployment are organised by the competent departments of the central State administration and carried out under their supervision, the control of all works being centralised at the Ministry of Communications. The Government has also instituted a special unemployment relief fund, together with a committee for the administration of the fund. The works are actually carried out by the appropriate State authorities or undertakings or by the municipalities.

Ethiopia.

All public works have been carried out by order and on behalf of the central authority, either by Government services or under contract, save in a few exceptional cases where the works have been executed by special arrangement.

Roads and airports have been constructed by the competent departments direct, whereas the wireless stations have been constructed by foreign companies.

Finland.

The works described have been carried out in execution of the " emergency public works " programme for the relief of unemployment. The organisation of such works is left in the main to the communes, the State confining itself as a rule to co-ordination and

financial assistance. Where necessary, however, the State also organises relief works on its own account. In a number of cases, such works have also been carried out by private enterprise.

As, however, the sole purpose of all these works is the assistance of the unemployed, they are on a small scale.

France.

Ordinary public works are carried out by the State, either direct through the various Government departments or by means of special grants to the departments, public establishments and authorities concerned.

The works carried out by the Central Roads Department, for example, are usually executed by the State, and it is only in rare cases that the latter places them in the hands of private bodies, while itself retaining nothing more than supervisory powers. Contracts are usually awarded by a variety of methods (public tenders, restricted tenders with a fixed maximum, "concours" or joint financing by interested parties). Only subsidiary and maintenance works are executed departmentally.

Works for the post, telegraph and telephone systems are executed on behalf of the State and, apart from minor works, carried out departmentally. The contracts are awarded by private treaty, estimates being requested from competing firms, or after a public call for tenders.

In the last place, rural development works are generally carried out by the local public authorities; the State, however, affords technical and financial assistance through the competent Government department.

As an unemployment relief measure, steps have, moreover, been taken by the Government with a view to the execution of works designed to improve national, and also departmental and communal, technical equipment. Departments and communes undertaking such works may obtain a subsidy from the State. The works carried out in this manner consist in the main of public buildings, dwelling-houses, departmental and communal roads, land reclamation, town-planning, electrification in rural districts, conservancy and forestry, etc.

Lastly, a plan of major unemployment relief works is in course of execution under the centralised direction of a national commission, whose duties include the elaboration of a general plan and of detailed lists of the works to be carried out, classified according to their nature and the urgency of the requirements which they are intended to meet. Such works may also be jointly authorised by the Finance Minister and the Ministers concerned, who are also permitted to grant State assistance in financing such works. These works are carried out entirely by local public bodies, public establishments, colonies, the great railway companies and certain approved contractors, and any other bodies having obtained a departmental or communal guarantee.

The programme of these major works includes some to be carried out without State grants—*e.g.*, electrification work and improved safety equipment of the great railway systems, town-planning, water-power, etc., together with works subsidised by the State, more particularly those in connection with the abolition of level-crossings, the provision of cheap housing, construction of roads and bridges, inland navigation and rural development.

Greece.

The State has concluded an agreement with a company of contractors for the execution, under direct public control, of the works connected with the construction of a road system.

For other road works, ordinary tenders have been invited.

As regards hydraulic works, the execution of those connected with the conservancy of watercourses and drainage has been placed in the hands of private undertakings, while tenders have been invited for certain works for the extension of harbours.

Haiti.

The works are carried out by the Directorate-General of Public Works.

Hungary.

The works described are carried out by the State on behalf of the various Ministries concerned.

India.

The works are partly carried out by the Provincial Governments on their own behalf under the direction of State engineers or the competent Departments of the Governments in question. The works are carried out in part departmentally and in part by contract. Many works are also carried out by the Government of India on its own behalf, either direct or through interested bodies (particularly railway companies), and sometimes with the technical assistance of firms specialising in such work.

The above-mentioned bodies sometimes execute works under their own management and control.

Iraq.

Works are generally carried out on behalf of the Government, and sometimes of concession-holders. They are executed either direct by the central authority or by local contractors, or by a combination of the two methods. In certain cases, foreign firms have also been allowed to make tenders.

Irish Free State.

The hydraulic and reforestation works are carried out by the competent State authorities.

As regards roads, the State does not itself undertake the work, but makes grants to local bodies, who have the works carried out direct by their competent services or else by private undertakings under contract. Repair works in rural districts are sometimes allotted in small sections, in which case the contracts are frequently awarded to labourers or very small landowners, who are thus occupied at a time when agricultural work is not possible or necessary.

Work for the improvement of estates is carried out direct under the supervision of the Irish Land Commission. On the other hand, land reclamation is carried out by the landholders themselves, who, however, can obtain a State grant equal to a quarter of the cost.

Buildings are constructed under State supervision by local bodies, public utility societies or private individuals, in general under contract, but in certain cases also by the direct employment of labour.

Works in connection with the water supply and sewerage are carried out by the local authorities; the same applies to harbour works, which are carried out by the local authorities, either direct or by the award of contracts to private undertakings, the State being only associated with such works to a limited extent.

Italy.

Large-scale works are carried out directly by the State, with or without the financial participation of the local bodies concerned, either through the competent Government departments and services or through special offices set up to deal with particular classes of works.

Works of primarily local importance are carried out by local bodies with State assistance or grants; when necessary, the State may even make itself entirely responsible for the work, subject to repayment of the cost.

Very small sections of works may sometimes be carried out by private individuals with State grants. Generally speaking, the works are carried out by contractors, as a rule by private arrangement, but also on the basis of public tenders. In exceptional cases, particularly in regard to minor works, the contract is allotted by special arrangement or else the work is done by the public services. Another method frequently employed is that of concessions to public or private bodies.

As regards, more particularly, "complete reclamation" works, a special Department with an Under-Secretary of State has been given full charge of all works coming under the modern conception of complete reclamation. These works include those for which the State is responsible and which are executed by it directly or through contractors under the control or supervision of the civil engineering technical services, together with those works carried out by private individuals with State subsidies.

Latvia.

Public works are carried out by the various governmental institutions or the municipalities or agricultural organisations. As a rule, the works are executed directly under the authorities responsible.

Forestry works are executed by the State Forestry Department and by the Ministry of Social Welfare, the latter's chief concern being the relief of unemployment in areas remote from means of communication. Certain forestry improvement works are also carried out by reclamation societies, which include the landowners interested and the municipalities.

Lithuania.

The method applied by the Government in the matter of public works for the relief of unemployment is remuneration in proportion to the amount of work done, execution being left to the municipalities.

Luxemburg.

The works are usually carried out on behalf of the Government. Nevertheless, the work on water supply and sewerage is undertaken by the communes concerned, with a State grant. The works are carried out by contract, with the exception of certain surfacing operations, which are under direct public control.

Netherlands.

A clear distinction is drawn between ordinary public works and those the aim of which is to provide work for the unemployed. In the case of the latter, direct responsibility devolves upon the organisations undertaking the works—that is to say, the communal authorities, institutions or companies concerned or upon private individuals. The works may be carried out directly by the authorities or under contract.

New Zealand.

Most of the work in connection with roads is carried out by the competent department of the State; certain road works are, however, undertaken by local authorities, or by the Main Highways Board. The latter is responsible for the construction and upkeep of the

main highways. It usually grants subsidies to the local authorities, which generally carry out the works, with the Board's approval, by contract after public tender, save in exceptional cases, when the work is done by day-workers. In certain cases, however, the works are carried out direct by the Highways Board.

Hydraulic, irrigation and land improvement works, the construction of railways, airports and public buildings, and also post-office, telegraph and telephone installations, are carried out by the Administration, either under contract or direct.

Works in connection with water supplies and sewage disposal are carried out by the local authorities concerned, without the participation of the State.

Lastly, harbour works are carried out by the authorities of the harbours in question, either direct or by contract.

Norway.

Works in regard to roads, railways and inland waterways are usually carried out directly by the competent public administrations of the State, sometimes in co-operation with the communal authorities, especially in the case of road construction, with a view to combating unemployment. On the other hand, as regards works in connection with the bringing of land under cultivation and reforestation, the rule is that the individuals concerned and private undertakings should carry out the works with a grant from the State. Lastly, the system of awarding contracts to companies for the execution of public works is rarely employed.

Poland.

Public works are undertaken, on the one hand, by various competent branches of the State Administration and, on the other, with the assistance of the "Labour Fund", which carries out works for the purpose of combating unemployment or co-operates in their execution. Lastly, in certain cases, the works are carried out mainly by local autonomous bodies.

The "Labour Fund" does not carry out works direct, but takes the initiative, draws up or co-operates in drawing up the schemes, and usually supervises the works, subsidises their execution, and co-ordinates the various activities connected therewith. The works are actually carried out by State institutions, autonomous administrations or undertakings, either direct or under contract.

Road works are carried out, according to the class of road, on behalf and by order of the central or regional authorities, or by the communes.

As regards bridges, ordinary work is carried out by the public authorities, and other works under contract.

Railway works are carried out by the "Polish State Railways", except in the case of railways for which concessions have been granted to private companies, and certain local railways on which the works are carried out by the local authorities. Contracts in respect of large supplies are also awarded, in the majority of cases, to national undertakings.

Land-improvement works are carried out by syndicates comprising the landowners concerned and the regional authorities; the works carried out on behalf of these associations are supervised by the State services. Certain minor works are carried out by the State organs on behalf of the owners concerned and with assistance in kind supplied by the latter.

Works in connection with maritime ports are carried out on behalf of the State by private undertakings under tender.

Works in regard to the construction of airports are carried out by the State.

The construction of dwelling-houses is encouraged by the State, which grants credits and also fiscal facilities.

Lastly, works in regard to posts, telegraphs and telephones are handed over, under tender, to private undertakings, which execute them on behalf of the State and under the supervision of its organs.

Portugal.

Railway works are carried out by order of the Railway Department, either directly, under administrative control, under contract, or, lastly, by undertakings to which concessions have been granted.

Water-supply and sewage-disposal works are carried out under the supervision of the State Administration, and in some cases with a grant from that Administration, by municipal councils, under contract.

Harbour works are carried out either by order and directly on behalf of the State Administration or by the autonomous harbour boards under the authority of the State, by contract, with the exception of certain minor works, which are carried out direct by the authorities.

Works in connection with inland waterways, posts, telegraphs and telephones are carried out by the State Administration, either under contract or direct.

Lastly, public buildings are constructed by the State Administration under a general or partial contract, to enable workmen to profit thereby with a certain degree of autonomy.

Salvador.

The construction of national trunk roads is under the direct charge of the State, of national departmental roads under the charge of the departments, and, lastly, of local roads under the charge of the municipalities.

The remaining works are carried out, according to their importance, either by the State authorities or by the municipalities.

Sweden.

With a view to combating unemployment, a Central Unemployment Commission was set up by the State to decide upon and direct the execution of "State Reserve Works", mainly intended to give employment to a large number of workers under certain special conditions, *inter alia*, at less than the normal wages. Similarly, with a view to encouraging the communes to undertake "reserve works" for this purpose, the State has granted them subsidies. This method was revised and supplemented in 1933, when the State put in hand large public works under open-market conditions, which had not been applied in the case of the reserve works. Of the various works carried out under these conditions, some were executed by the State, some by communes, and others by public institutions or private individuals, with the assistance of State subsidies and loans. These subsidies are granted under specific conditions, and may not exceed a certain proportion of the total expenditure. At the present time, works carried out under open-market conditions occupy a foremost place in the public works system in Sweden.

Lastly, there is a third class of public works known as "anticipatory" works, which are carried out either by the State or the communes, likewise for the purpose of reducing unemployment; the execution of these works is not, however, subject to the special rules applicable to "reserve works".

Switzerland.

The works are usually carried out, according to their nature and the purpose for which they are intended, by the Confederation, the cantons or the communes, usually by contract after public tender but also directly by the authorities. A central office for the

co-ordination of public works has also been set up, mainly with a view to the seasonal allocation of the works and the best and most rational use of labour. This central office also examines the proposals for relief work submitted by the cantons and communes, with a view to receiving a grant from the Confederation. This relief work is extraordinary work designed to combat unemployment, and is chiefly carried out by the communes but partly by the cantons. In the former case, the cantons must also contribute a subsidy equal in principle to the Federal grant, but not exceeding the maximum of 30 % of the total expenditure. On the other hand, the Federal grant may amount to not more than 60 % of the expenditure.

The Confederation likewise grants ordinary subsidies to the cantons and communes for certain specific kinds of works. On the other hand, only works of a Federal character are carried out by it direct or by bodies under its authority (Federal Railways, Administration of Posts, Telegraphs and Telephones).

Lastly, certain special works (hydro-electric plant) are carried out by associations consisting of public bodies or by co-operative societies subsidised by the cantons.

United States of America.

There are three different categories of works :

(1) Those undertaken by the Federal Government or bodies under its direct control for which the Federal Government makes direct Federal grants;

(2) Those undertaken by the several States, local authorities and other public bodies which the Federal Government helps to finance by means of Federal loans and grants;

(3) Those which, though undertaken by private organisations, are of public interest — *i.e.*, works made possible by loans from the Federal authorities and generally of considerable importance for the country's economic future.

As regards the works in class (1), the special Federal Emergency Administration of Public Works has been set up by Statute to act as a central public works authority. Under the act, the Federal Government executes public works through its various competent services and organisations, in some cases direct, in others under contract.

In addition, the Civil Works Administration has been set up with a view to the execution of local improvement works by the unemployed. Another body created to provide work for the unemployed is the Emergency Conservation Work Organisation, works for which are carried out through various Governmental services.

In the last place, the Tennessee Valley Authority (created with a view to the economic and industrial development of the whole of the area in question), the Subsistence Homesteads Corporation for the creation of small workers' holdings and the Public Works Emergency Housing Corporation have been created; the works sponsored by these bodies are carried out either direct by the Federal Government or under contract.

In its special report, the Federal Emergency Administration of Public Works gives a detailed description of the organisation, working and methods of its various services, and, more particularly, of the procedure in the matter of the preparation and examination of projects, the selection of those which can be recommended for Federal assistance and, lastly, the actual granting of such assistance by the competent authority — that is to say, by the President on the recommendation of the Special Board for Public Works.

Yugoslavia.

For the most part, public works are carried out at the expense of the State or the " Banovines " (provinces) and other autonomous bodies. In both cases they are carried out either directly by the authorities or through private undertakings.

Harbour works, in particular, are usually carried out by the State authorities by contract after public tender, although some are executed by the municipalities concerned.

The construction of railways, which are largely owned by the State, is carried out by order and on behalf of the State central authority, by private firms under Government control, the contracts being awarded after public tender.

Works with a view to developing State and other public forests are carried out by the State authorities direct. Reafforestation works are also carried out either by the State direct or by local labour, with the material help of the State.

Waterways conservancy works are carried out direct by the provincial authorities.

Agricultural land reclamation works are carried out partly by the syndicated hydraulic associations with a subsidy from the State and provinces, and partly by the State department for colonisation. All the works are executed by contract awarded after public tender, with the exception of colonisation works, which are charged to the special colonisation fund, and are carried out under the system of direct administration by the State and by the labour of the colonists concerned.

II. PRINCIPAL METHODS EMPLOYED FOR FINANCING PUBLIC WORKS.

Union of South Africa.

Most of the works are financed under the ordinary budget of the State. The funds are obtained partly from current revenues and partly from loans raised internally or externally. As regards loans, the provision needed annually is made in the estimates of expenditure out of loan funds. This applies to new reafforestation, irrigation, telegraph and telephone installations and other works.

As regards agricultural land reclamation and land protection, when the farmers undertake the work themselves they are paid a bonus by the State, which also grants special loans and subsidies for the purpose. When unemployed labour is utilised, the Government pays a subsidy to the extent of seven-eighths of the wage-bill, the remainder being registered as a quit-rent on the land, repayable without interest over a period of fifty years.

Railway and harbour construction is usually financed out of railway and harbour appropriations voted annually by Parliament and paid mainly out of capital and betterment funds. In some cases, however, the local authorities share the cost with the central administration. Lastly, the cost of unskilled labour on some railway lines has been refunded by the Labour Department.

The establishment of airports is usually financed out of local revenues and sometimes from loans issued by the local authorities secured by these revenues. In some cases, a special sinking fund is set aside for the purpose. Lastly, these loans are sometimes secured by the town estate and the right to levy a special rate assessment for the repayment of the loan.

Electrical undertakings are usually financed by means of external loans raised by the Government or by private companies and societies. The works undertaken by the Electricity Supply Commission were originally financed by the Treasury and subsequently by loans for which the Commission issued shares.

For the establishment and operation of public broadcasting stations, licences are granted to private companies, which bear all capital and other charges incurred in respect of these services.

Lastly, loans are raised to finance the execution of public works in the mandated territory of South West Africa.

Australia.

Commonwealth Works.

Commonwealth works are generally financed from ordinary revenues or Commonwealth loan funds. Sundry works are financed out of a special unemployment relief fund.

Federal road works are financed more particularly from Customs revenue on automobiles and the tax on petrol. Part of the latter, however, is divided between the various States as the Commonwealth contribution towards the construction of non-Federal roads by these States.

Railway construction is usually financed out of Commonwealth loan funds, but in some cases special financial agreements have been concluded with the States concerned. This also applies to the River Murray works. The cost of the construction of these works is shared equally by each of the Governments of the States concerned. It is charged to their ordinary budgets, the amount being provided, according to the decision of the individual Government, from revenue or loan funds.

Works carried out by the Various States.

New South Wales.

Public works are usually financed by the State by means of loans or special taxes, sometimes from ordinary budget receipts, and, lastly, from the unemployment relief fund. Advances are made to public bodies and private individuals. Such moneys are repayable at from 3 % to 5 % interest. The local authorities usually refund to the Government any expenditure on the execution of public works which it has incurred on their behalf. In some cases, those benefiting from the works (irrigation, for instance) repay the sums expended direct.

Apart from the Commonwealth contribution from the tax on petrol mentioned above, road works are financed more particularly by a special tax levied by the Governments on motor vehicles and by subsidies granted by the local authorities, which, moreover, also levy a local tax for this purpose.

For some types of works, particularly agricultural improvement, expenditure is met from loan funds raised by the Commonwealth and appropriated to the States. These loans are guaranteed by the Commonwealth and secured by means of shares. Some public communities and local bodies may also contract loans direct. These loans are usually guaranteed by the State and secured by its consolidated revenues.

Lastly, unemployment relief works are financed from the unemployment relief fund, the unemployment relief tax and a tax on wages and income.

Queensland.

Public works are financed by the Governments out of the proceeds of internal loans. Subsidies in the form of repayable advances are also granted by the Governments to semi-governmental bodies. Some of these bodies also contract loans direct, however.

Tasmania.

Construction works are financed by loans guaranteed by the State and carrying a sinking fund. Works of lesser importance are charged to the ordinary budget. Federal subsidies are also granted for some works.

South Australia.

The various works are financed for the most part from loan funds and less frequently from ordinary revenue. Road works are not financed from loans, but out of receipts and funds received from the Federal Government in respect of the tax on petrol.

Western Australia.

Works are financed for the most part by loans secured by ordinary shares.

Works carried out by local authorities are financed by special grants from the Commonwealth Government and also by loans secured by shares.

Internal and external loan requirements are financed by advances from the Commonwealth Bank and secured by Treasury bills. A sinking fund is provided for redemption, and the contributions of the State and Commonwealth are paid into this fund.

Victoria.

Works are financed partly from Commonwealth loan funds and partly from State loan funds. These loans are both internal and external. For some works, special funds have been constituted—for colonisation and forestry, for instance. The municipal councils concerned usually refund to the State a considerable part of the expenditure advanced, particularly for road construction. This also applies to other bodies.

Lastly, some works are partly financed out of the unemployment relief fund, particularly railway construction and hydraulic works.

Austria.

Works are usually financed entirely out of the ordinary budget of the Federation, particularly the cost of constructing Federal buildings, Danube and frontier waterways conservancy, and airports. Sometimes, in addition to credits from the ordinary budget, works are partly financed out of an extraordinary budget—by means of a lottery loan. This applies particularly to bridges, Federal expenditure on hydraulic works and Federal roads. It also applies to posts, telegraphs and telephones, which are partly financed, in addition, by means of international loans.

Furthermore, apart from the Federation, the provinces, districts and communes, and sometimes the semi-governmental bodies concerned, also share the cost of certain works, particularly building works, bridges, airposts and, lastly, hydraulic works other than the Danube and frontier waterways conservancy. For hydraulic works, funds are also provided from the productive unemployment relief fund.

As regards the financing of Federal roads, apart from the facts mentioned above, an Austrian road fund was constituted in 1933 for urgent large-scale works. This fund is empowered to finance works, either through the award of contracts on credit or by the issue of loans.

Lastly, the costs of normal works constituting a charge upon the operating account of the Austrian Federal Railways are covered out of the railways' own resources. On the other hand, the cost of works enhancing the value of the enterprise is borne by the Federation, which makes repayable advances to the enterprise out of the proceeds of various Federal loans.

The costs of construction of private (local) railways are met by the concession-holders or proprietor companies out of their own resources, or by the issue of shares. In some cases, however, the Federation and provinces concerned have granted subsidies to the concession-holders out of their ordinary budgets, or else have guaranteed loans raised by the latter.

Belgium.

Most public works are carried out with money supplied by the State. For instance, the Special Major Fund which finances major works on waterways has at its disposal sums paid to it by the State and included every year in the extraordinary budget. Other hydraulic works are usually included in the ordinary budget. The same principle is observed in the case of road works and building; new constructional work, extensive repairs and the acquisition of land are charged to the extraordinary budget, while upkeep is charged to the ordinary budget, both being covered by resources common to all Government expenditure.

The Government authorises the loans necessary for the execution of electrical installation works; as regards works for the long-distance supply of gas, the various authorities grant loans. The State does not intervene in either case in the financing of these installations.

United Kingdom.

The Government intervenes in various ways in the financing of public works. Generally speaking, they are financed mainly by borrowing, and State assistance has taken the form in most cases of a direct continuing contribution towards interest and sinking fund.

State subsidies have also been granted for housing by a special unemployment grants committee. This committee is no longer empowered to make special grants, however. Lastly, the State does not give grants for works carried out by local authorities and public or other bodies, but guarantees loans raised to finance them.

Bulgaria.

Credits required for the execution of public works are included in the ordinary budgets of the State, local bodies and public corporations.

On the other hand, land distributed by the State for colonisation will be paid for by the settler families in the course of twenty years in equal annual instalments.

Canada.

The expenditure of the Dominion Government on ordinary works is budgeted for as regular expenditure. On the other hand, expenditure provided for under the various relief acts is budgeted for as special expenditure.

All expenditure on authorised public works is paid out of the Consolidated Revenue Fund, and no part of it has been financed from any designated source of revenue or by means of a particular loan.

The Federal Government bears the whole of the expenditure on Federal works in connection with unemployment relief.

Direct grants by the Federal Government to the provinces represent only a proportion of the sums required for the execution of the works projected.

Chile.

Considerable expenditure for public works was authorised on the basis of an extraordinary plan. In addition, a special fund was constituted under the Road Law. Further sums were provided for under other special laws. On account of the Treasury crisis, however, only part of the works projected was carried out.

Up to 1931, some works—in particular, railway, road and hydraulic works and building—were borne on an extraordinary budget which was financed by foreign loans; since then these works have been borne on the ordinary budget, funds being also provided to give employment to the unemployed. These funds are raised by internal loans and various general contributions or taxes. Road works, however, are now financed out of the revenue obtained under the Road Law and by the extraordinary budget.

Irrigation works are carried out by the State, which inserts the sums required in the budget. The beneficiaries of the works carried out, however, are required to refund to the State the sums expended thereon in thirty-six and a-half years in annual instalments at the rate of 5% interest and 1% amortisation, starting from the fourth year after the work has been put into use.

China.

The capital required for the construction of railways is provided, according to each special case and to the nature of the line, by the Central Government or the provincial Governments from their own resources or by the issue of a loan. The capital of private railways is provided by the shareholders or private individuals concerned.

Hydraulic works undertaken by the National Economic Council are financed partly from Central Government funds and partly from provincial funds and sometimes from both. The expenditure thus borne by the Central Government is usually charged to the extraordinary budget; that borne by the provinces is partly covered by internal loans. The Central Government has advanced certain sums to the River Commissions for their works, and these sums will subsequently be refunded.

The funds for the reconstruction work necessitated by the great floods in the Yangtse-Kiang Valley in 1931 came partly from a loan of wheat and cotton which the Central Government obtained from the United States of America.

Czechoslovakia.

The construction of national roads is partly financed out of the ordinary State budget and partly out of the fund created for the improvement of the road system out of the proceeds of internal loans. The interest and amortisation are provided out of the motor taxes. Other roads are financed by means of State and provincial subsidies, up to a maximum of 60% of the total cost, the remainder being borne by the communes or covered by departmental loans.

The cost of works for the State railways is met either out of the operating profits, by Treasury advances, or by credit operations.

Agricultural improvement works and development undertakings are for the most part financed by State or provincial subsidies, the balance of the cost being found by the interested parties by whom the works are carried out out of their own resources or by means of loans.

Water-supply and sewerage works are subsidised by the State or the provinces out of their ordinary budgets up to a maximum of a third of the total costs. The remainder is borne upon the extraordinary budgets of the communes, the funds of which are provided by loans.

Works on inland waterways, harbours and hydro-electric power stations are financed by a State hydraulic fund, the resources of which are provided more particularly by a State grant, by contributions from local bodies and, in the last place, by loans the service of which is ensured by the revenues of the fund.

Electrification works are financed by the communes or out of the electricity companies' own share capital, and also by the issue of bonds or loans guaranteed by the State or

the provinces. For rural electrification, the State also makes grants not exceeding 50% of the total costs.

The construction of public buildings is financed according to the circumstances either by the State alone out of the extraordinary budget, or by the State with the participation of the departments and communes concerned.

The construction of gasworks is financed out of the extraordinary budget of the communes concerned.

In the last place, the funds for works on the installations of the telegraph, telephone and broadcasting services are found by the State undertakings or institutions concerned. The costs are also met to some extent by the "labour loan". In certain cases, this loan has also been used to finance the construction of airports and public buildings.

Denmark.

Expenditure on railway construction is, in general, included in the ordinary budget of the State. In some cases, however, it is met out of the proceeds of foreign loans. The expenditure on certain bridges which are also intended for motor traffic was met partly out of the proceeds of a tax on petrol.

The greater part of the expenditure on bridges and roads is met out of the proceeds of taxes on motor vehicles and the remainder out of various ordinary Government and local taxes, and sometimes also by internal loans raised by the communes to enable the work to be carried out more rapidly.

Expenditure on hydraulic works is covered by the annual budget of the State. The State made a grant, however, to defray the whole cost of the drainage of the polders, on condition that the owners of the area concerned refunded one-third. For this purpose, the State was authorised to raise the funds by issuing bonds.

The unemployment fund grants subsidies, not exceeding 30% of the wages paid, for unemployment relief works. The State bears the cost of two-thirds of this subsidy; the remaining third is borne by the communes.

Egypt.

Public undertakings executed by the Government are usually financed by appropriations included in the budget of the department concerned and charged to the revenue of the State. In time of prosperity, extraordinary appropriations are sometimes made from the State reserve funds.

With regard to undertakings carried out by local bodies, water, lighting and sewerage undertakings are financed by State-guaranteed loans from the local banks, repayable in from thirty to forty years. The necessary funds for other local works are taken from the budgets of the bodies concerned.

Estonia.

Credits for public works are placed by the State at the disposal of the Ministry of Communications, which is in charge of all works.

The special unemployment fund is derived from several special taxes for alleviating unemployment, sums allotted out of the State budget, and repayable State loans. The whole cost of public works carried out by the Central Government is paid by appropriations from this fund; on the other hand, as a rule only 75% of the value of the work done by local bodies is met by grants from the fund. An exception is made in the case of certain classes of work of public importance, when the grant may be increased up to 100%.

Foreign and internal loans were contracted for some of the works carried out by the Municipality of Tallinn.

Ethiopia.

All expenditure on the work carried out for account of the central authority is covered by an extraordinary budget of the State.

Finland.

The State contributes towards the financing of unemployment relief works, mainly by means of grants. The whole of the amount required is raised by national short-term loans. Expenditure on other public works, however, is met out of the ordinary budget of the State. In some cases—for instance, the drainage of agricultural land and forest marshland—the beneficiaries pay a share of the expenses in the form of redeemable loans.

France.

The expenditure on ordinary public works carried out by the State is covered by the ordinary budget of the State. Grants to departments, public institutions and other bodies for the execution of works are also charged to this budget. In addition to the ordinary appropriations, appropriations for perfecting the national equipment have been granted since 1929, and this has enabled much work to be done.

The railway companies and the communes are responsible for nearly a third of the cost of the suppression of level-crossings. Work in respect of posts, telegraphs and telephones appears under the heading "Extraordinary Expenditure" in the Post Office annex to the budget and is met by the issue of bonds. Until such issues are made, the Treasury makes advances. These bonds are redeemable within a period not exceeding thirty years. The sums required for interest and redemption appear in the ordinary expenditure of the annex to the budget, such expenditure being itself covered by working receipts or from the general budget. All these bonds are subscribed for in France.

As regards rural equipment, the State gives financial assistance by means of Treasury grants varying from 10 to 50 %. The rest of the expenditure is borne by those concerned. They sometimes also receive departmental grants, however, and may also, in case of need, obtain funds by means of loans from certain State funds. On the other hand, in order to encourage the unemployment relief work of the departments and communes, a credit fund has been set up by the State. Furthermore, rebates of interest have been granted to departments and communes contracting loans for the purpose of undertaking work for the relief of the unemployed.

The State partly finances the plan of large-scale works for the relief of unemployment, and has for this purpose constituted a common labour fund in connection with the Social Insurance Offices under the supervision of a national committee. This enables the State to finance the important programme of works by means of loans to the common fund. Bodies participating in the execution of the works have a prior claim on loans from this fund, standard contracts in respect of such loans being drawn up by the national committee. These loans are repayable in annual instalments within a maximum period of from thirty to fifty years.

Greece.

Road works were originally financed by foreign loans and afterwards, owing to the depression, out of the State budget. The same applies to hydraulic works, which the depression has also made it necessary to finance out of the State budget. On the other hand, certain harbour and town-planning works have been financed by internal loans.

Haiti.

The State places funds for the execution of works at the disposal of the Directorate-General of Public Works.

Hungary.

The cost of public works is borne by the Government and provided out of the State budget. In the case of certain hydraulic works carried out by dyke-building and drainage associations, however, the State assists the financing with subsidies and loans, the remainder of the cost being borne by the associations out of their own funds.

India.

Works are financed in some cases direct by the Government of India itself; in others, by the various provincial Governments out of loan funds or else out of ordinary budgetary revenue. In the latter event, it is sometimes budgetary balances which are used for the purpose.

The financing of certain other works is assisted by grants and loans to municipalities and other local bodies, which also bear a certain share of the expense themselves.

In certain cases, these various methods of financing have been combined.

Iraq.

The cost of works is normally covered out of the ordinary or extraordinary State budget; in certain cases, the costs are recovered from the concession-holders.

Irish Free State.

Road works are financed out of State funds, the Government making grants to the local bodies which are actually responsible for construction. These last also make a limited contribution to the cost. In the case of buildings constructed by local authorities, hydraulic works, harbour works and works connected with water-supply and sewerage schemes, the costs are also partly covered by State grants or advances out of budgetary revenue, particularly when the works are designed to relieve unemployment. The remainder of the cost of such works is covered by contributions from the local authorities. The latter are also authorised to contract loans, by public issue, for the execution of the above-mentioned works. To contribute to the financing of road works, a Road Fund is maintained out of the taxes levied by local bodies on the owners of mechanically propelled vehicles; the funds brought in by these taxes must, indeed, be exclusively used for such works. State building grants may also be allocated, through the local authorities, to the public utility societies and to private individuals.

State loans for the above-mentioned works are repayable by annual instalments and guaranteed by local taxes or mortgages on the buildings concerned, and, in the case of harbour works, by harbour revenues. In the case of hydraulic works, a levy is also made on those benefiting thereby by way of contribution to the cost. Expenditure on public buildings for the Government services is borne either entirely by the State or jointly by the State and the local authorities concerned.

The greater part of the sums required for estate improvement comes from the moneys annually voted for this purpose by Parliament and is employed to make grants to those concerned, in some cases subject to partial repayment. In addition to the normal expenditure, considerable sums have been allocated to works of this kind as a measure of unemployment relief.

Italy.

The cost of works carried out direct by the State is borne on the budget of the Ministries concerned; in the case of ordinary works, the necessary funds are shown as ordinary expenditure, whereas, in the case of extraordinary works, the chapters of the budgetary estimates correspond, not merely to the various categories of works concerned, but also to the proposed methods of financing them—that is to say, lump-sum payments, or else payments of annual instalments for works carried out under concessions, the payments being deferred, or in connection with subsidies or contributions.

The cost of works carried out by local bodies is borne by their respective budgets with the assistance of State subsidies or contributions. In certain cases, the State also makes grants to private individuals. All these grants and contributions are borne upon the budget of the Ministry of Public Works. In certain cases, the State also adopts the system of partial repayment of the cost of such work. Where necessary, it authorises local bodies to contract loans to finance public works.

Latvia.

Public works are largely financed out of the special unemployment relief fund maintained by a levy deducted at the source on the wages of officials and employees, together with contributions by employers, house-owners and professional people. The remainder of the cost is covered by special credits in the State budget.

The necessary funds are allocated to Government institutions and agricultural organisations in the form of non-repayable credits, while the municipalities receive half of the money placed at their disposal in the form of a subsidy and the other half as a loan for a period of ten years with interest at 1 % per annum.

Lithuania.

Labour costs are defrayed out of a Public Works Fund created for the organisation of unemployment relief works, the municipalities being responsible for supplying the raw materials, etc. The fund is maintained by taxes on employers and contractors, and by grants from the State and the municipalities. It is sufficient to provide work for all the unemployed.

Before the creation of this fund, a third of the sums required for unemployment relief works was supplied by the State and the remainder by the municipalities.

Luxemburg.

The cost of the works is covered by a loan, or out of the ordinary State budget, or out of the municipal budgets of the communes.

State grants to the communes for works in connection with the water supply and sewerage amount generally to about 10 % of the total cost in the case of the former and 25% in the case of the latter.

Netherlands.

Unemployment relief works are partly financed by Government grants provided for in the State budget out of ordinary revenue. The expenditure borne by the communes is partly covered by ordinary revenue and partly by internal loans. In 1935, moreover, the Government proposed to create a special fund to finance the works.

New Zealand.

The greater part of the expenditure on road-building is borne by the State out of foreign loans repayable by annual instalments; the sums required for the service of such loans are provided out of the general revenues of the State. A smaller share in the expenditure is borne by the local bodies, in the main out of local rates, but also by means of internal loans secured upon a special land tax. In addition, the State assists the financing of road works by means of the "public works fund", which is maintained by loans, and also by means of the Highway Board, the funds of which are derived from national taxation on the motorist road-user and sometimes also from loans. The Board makes grants up to 75 % of the total expenditure incurred by local bodies on road works.

In certain cases, the Government grants loans repayable by annual instalments to those undertaking hydraulic works and land improvement. In other cases, the cost is borne by the Governments out of loan funds.

Harbour works are generally financed by loans secured upon the revenues of the harbour boards concerned and sometimes by a special tax.

The building of airports is financed either direct out of State revenue or else by means of the Public Works Fund.

In the last place, the construction of buildings and postal, telegraph and telephone installations are financed by means of loans.

Norway.

The works are partly financed by the State and partly by the communes. Public organisations finance their own works.

The districts and localities concerned participate in the financing of railway building by contributions amounting generally to 15 %. The same principle is also applied to certain other categories of works.

In addition, the State makes grants or loans in respect of certain works carried out by the communes. Sometimes works are jointly financed by the State and the communes. The cost of public road building, for example, is borne as to 70 % by the State and 30 % by the communes concerned.

State expenditure for this purpose is regarded partly as ordinary expenditure and partly as extraordinary expenditure which is specially voted for unemployment relief.

Financing by means of loans is of rare occurrence.

Poland.

The cost of public works is borne in the first place by the "labour fund", which frequently finances the works undertaken by the State administration and also contributes to the financing of works carried out by independent local bodies and by private enterprise. The resources of the "labour fund" are obtained chiefly from a levy on wages, a contribution from the urban communes and the autonomous district unions, various consumption taxes, and, lastly, a contribution from the State. The credits made available out of the fund for the financing of works take the form of advances for productive works and subsidies for works which are not directly revenue-producing (*e.g.*, roads). The fund is chiefly intended to cover the costs of labour, and only provides credits for a certain proportion of the cost of materials, as a rule not exceeding 30 % of the whole, the remainder being found out of other sources by those to whom credits are granted.

As regards more particularly the works in connection with roads and bridges, the cost is borne partly by the "road fund", which is merely an annex to the State budget, and

partly by the budgets of the regional and local administrations, sometimes with the participation of public bodies. Recourse is not had to loans for road works.

The costs of railway-building are mainly covered in the first place by means of credits from the Polish State Railways Investment Fund, which forms part of the ordinary budget of that undertaking, and in the second place by means of credits out of the funds for unemployment relief works, included in the ordinary State budget, and in the last place by means of international loans.

As regards hydraulic works and land improvement, the State makes grants in aid of the expenses of the syndical associations, and for this purpose a State improvements fund has been created and is maintained by budgetary credits. In addition, the "labour fund" has been used for financing improvement works, contributions also being made by the autonomous administrations and the individuals concerned.

Funds to finance works in connection with navigable waterways are also provided in the State budget or else by means of internal or foreign loans, or, lastly, are obtained from interested private undertakings or joint-stock companies.

Harbour works are financed by repayable credits provided in the State budget; the airport works were originally financed by the State and subsequently by the Polish State Railways.

In the case of housing, the credits granted by the State represent a very high proportion of the expenditure, amounting in some cases to 90 %. Credits for workers' dwellings, on the other hand, are provided from the "labour fund".

In the last place, works in connection with the postal, telegraph and telephone services are financed by ordinary budgetary credits or foreign loans.

Portugal.

Railway works are financed out of the ordinary and extraordinary budgets. The extraordinary budget is constituted by internal loans guaranteed by the revenues of the special State Railways Fund, and redeemable in twenty years.

In the case of works in connection with water supply and sewerage, labour costs are financed out of the "unemployment fund", while the costs of the material are found by the administrative bodies concerned, either out of their own available funds or by means of loans guaranteed by the future receipts from the new works. Where necessary, the State bears a proportion of the expenditure of the administrative bodies, not exceeding 50 % of the total cost of the works, or alternatively guarantees the bonds issued for this purpose.

Harbour works are financed by the State out of loan funds. Certain harbour boards, however, have also contracted loans direct or have charged part of the cost of the works to their ordinary budgets.

The cost of works in connection with inland waterways is borne by the State Administration jointly with the administrative bodies concerned and the "unemployment fund".

Agricultural hydraulic works are paid for out of credits included in the extraordinary expenditure in the State budget.

As regards the construction of public buildings, the cost of labour is borne by the "unemployment fund", and the cost of material either on the budget of the State Administration or by the local authorities or public utility associations. Certain works have also been financed by means of loans contracted by the Government.

In the last place, works for the postal, telegraph and telephone services are financed out of the ordinary budget of that Department, and by means of loans contracted by the State.

Salvador.

As a general rule, expenditure on national works is covered out of the State budget, the cost of other works being borne upon the municipal budgets.

The expenditure on departmental roads is covered by special taxes, more particularly the taxes on cafés and part of the traffic tax.

Sweden.

The chief objects of the State's financial support of public works were, in the first place, unemployment relief, and, in the second place, the encouragement of industry, the artisan class, agriculture and the timber trades. Among the steps taken for these purposes was the creation of a special fund from which grants could be made. These were to be financed by means of loans, repayment being ensured by revenue from certain ordinary and extraordinary taxes.

The State funds allocated to public works are supplied either by the special credits for unemployment relief known as the "unemployment budget", or by credits in the ordinary budget.

In the second place, a distinction must be made between credits for works executed under open-market conditions and credits for the so-called State "reserve works", or communal "reserve works" subsidised by the State.

The State contributes to works carried out by local bodies and sometimes even by individuals by means of loans free of interest and without repayment for a period of five years, or by means of grants made either directly or through public institutions or bodies. Loans and grants alike are only accorded on certain stated conditions and may not exceed a certain proportion of the total cost, varying according to the nature of the works. The remainder of the cost is borne by local bodies, institutions or interested parties. Certain communal "reserve works", however, are entirely financed by the communes.

In the last place, special credits have been voted in the budget for "anticipatory works".

Switzerland.

Public works are, as a rule, financed out of ordinary revenue and are provided for in the ordinary budgets of the authority by which they are carried out (Confederation, cantons, communes).

Extraordinary works on a large scale (e.g., the building of modern roads) are financed by loans, the interest and amortisation charges on which are met out of the ordinary budget. Another source of revenue for road-building is the import duty on petrol.

Unemployment relief works, on the other hand, are financed by special credits from which the Confederation makes extraordinary grants to the cantons and communes.

The cantons and communes have increased certain taxes in order to cover the expenditure entailed by such emergency works. The Confederation and certain cantons have even introduced a temporary "depression tax" for this purpose.

The necessary credits for works in connection with the Federal Railways are granted by Parliament, repayment to be completed in a hundred years. Should the operating surpluses prove insufficient for the purpose, the expenditure is covered by internal loans guaranteed by the State.

The cost of cantonal and communal works is covered partly by the ordinary budgets of the authorities concerned, partly by special credits, and partly by the ordinary and unemployment relief grants made by the Confederation and cantons.

For certain works, advances are also made by the administration.

In the last place, the various methods are sometimes combined.

United States of America.

As regards Federal construction, large appropriations have caused a considerable increase in nearly all categories of works. The expenditure is either made direct or—in the case of roads—is given to the different States in order that they may carry out national works themselves. Federal construction is financed out of current revenue and, if necessary, by short- and long-term internal loans. This expenditure is shown separately in the budget, partly under ordinary and partly under emergency appropriations. With regard to the repayment of the loans, expenditure on self-liquidating works will return progressively to the Treasury. It is provided that any surplus on certain works must be paid over to the Treasury.

As regards non-Federal construction, considerable sums were advanced as loans or grants, bills or bonds being issued by the Federal Government to the States, municipalities or other public bodies, after consideration and approval by the competent Federal authority of the work projected. This made possible a considerable development in construction. Grants of this kind, however, may not exceed 30% of the cost of the labour and material employed. The rest of the expenditure on non-Federal works is obtained by various means; for the most part, however, taxes do not suffice and loans have had to be raised. The Federal Government only requires repayment of 70% of the loans advanced to non-Federal Government bodies.

As regards private construction, loans are granted by the issue of bonds after examination and approval by the competent Federal authority, particularly to the railways and for the construction of dwellings, as a contribution towards the financing of the works in question and the purchase of material. Part of the sum required is charged to the emergency appropriation voted by Congress.

Yugoslavia.

Public works are generally financed either out of the State budget or the budgets of the "banovines" (provinces) or the district road committees, or else by means of State subsidies with contributions from the parties concerned, the provincial road funds, certain stated revenues and, in the last place, internal or foreign loans.

The cost of harbour works carried out by the State is charged against the credits of the Ministry concerned and covered partly out of the State budget and partly by means of an Investment Loan.

The costs of new railway works are covered in general out of the extraordinary credits in the State budget—sometimes even to a lesser extent out of the ordinary budgetary credits—or else by means of foreign or internal loans. To finance such works the State has in certain cases contracted loans with the foreign undertakings executing the works. The service of such loans is provided by the budget, in which it appears under extraordinary expenditure. The amortisation schemes are based either upon State bills or bonds or on the payment by the State of its share of the periodic instalments at agreed intervals.

Works connected with the State forests and related works are financed by regular credits in the ordinary State budget. The waterways conservancy works are also paid for by ordinary budget credits, out of the budgets of the provinces, or lastly, and to a smaller extent, by credits out of the special public works fund and the special reforestation fund. Reforestation works are also financed in the same way.

Agricultural development works carried out by the hydraulic associations are largely financed by the latter out of their own resources or by means of loans contracted by them.

State and provincial grants are, however, also made available for such purposes and advances are sometimes made by the undertakings executing the works. Settlement works are charged to the special colonisation fund created by the State, together, in the case of certain works, with contributions from those concerned.

III. AN ESTIMATE, AS FAR AS IS POSSIBLE, OF THE ALLOCATION OF EXPENDITURE ON THE EXECUTION OF PUBLIC WORKS, AS BETWEEN MATERIALS AND EQUIPMENT PROVIDED BY NATIONAL OR FOREIGN INDUSTRY, ON THE ONE HAND, AND LABOUR—THAT IS TO SAY, WAGES AND MISCELLANEOUS SOCIAL EXPENDITURE—ON THE OTHER.

Union of South Africa.

As regards the works executed by the Department of Public Works, it is estimated that the cost of the labour directly employed and that of the materials delivered on the site each represent about 50 % of the expenditure.

In the case of works executed by the Department of Agriculture, roughly 70 % of the cost of anti-soil-erosion works goes to pay the wages of unemployed Europeans. Materials and equipment, generally of local manufacture, are supplied by the owners of the lands.

As regards the construction of airports, the proportion of the cost of labour varies greatly according to the nature of the works, but as a rule it represents the greater part. Materials and equipment are all locally manufactured, or, where necessary, are imported, almost always from the United Kingdom.

In the case of forestry works, it is estimated that labour represents 75 % of the total expenditure.

As to irrigation works, 70 % is accounted for by labour, 25 % by materials of South-African manufacture, and 5 % by imported materials.

Lastly, the materials and equipment in connection with the postal, telegraph and telephone services are obtained entirely from abroad, mainly from the United Kingdom, and represent approximately 56 % of the total expenditure; the remainder—that is, 44 %—is accounted for by labour and transport charges.

Australia.

Commonwealth Works.

The proportion of the cost of the normal works for the postal, telegraph and telephone services accounted for by labour is relatively low. In the case of the "new works", however, the proportion has varied between 30 and 55 % according to the year.

As regards the River Murray works, the expenditure on labour and materials is, in each case, estimated at 50 % of the whole.

Works carried out by the Various States.

New South Wales.

In the case of the works carried out for the Unemployment Relief Council, the expenditure is normally equally divided between labour and materials. As, however, endeavours have been made to increase, as far as possible, the amount spent on labour, such charges have in certain cases (country roads, drainage) amounted to as much as 85 % of the total. The materials are almost entirely of local origin.

As regards the works carried out by the Public Works Department, the proportion spent on labour has varied between 35 % (urban water supplies) and 60 % (land reclamation).

In so far as irrigation works and the provision of water supplies are concerned, wages represent 40 to 50 % of the total cost.

The proportion represented by wages in the cost of forestry works is 80 %, the remainder being spent on materials, all of local origin.

Labour, it is estimated, accounts for 50 % of the cost of main road works. As, however, all the necessary materials are also produced in the country, it is believed that, in the long run, 95 % of the cost goes in wages or payments to local industries.

As regards agricultural development works, 30 to 40 % is spent on labour and 60 to 70 % on materials, almost all of Australian origin. In the case, however, of works in this category carried out with a view to the relief of unemployment, the proportion accounted for by labour is sometimes increased to 50 %. The share of labour in works for bringing new land under cultivation sometimes amounts to 100 % of the total cost.

Queensland.

All the materials used are of Australian origin.

Tasmania.

Labour charges are estimated at 75 % and materials at 25 %.

South Australia.

In the case of most works, labour accounts for 40 to 50 % of the total costs. In the case of road-building, however, the respective proportions are two-thirds for labour and one-third for materials, while in the case of forestry works labour charges are estimated at 75 %.

The materials used are largely of Australian origin.

Western Australia.

Wages represent on an average 62 % of the total. Here, too, the materials are almost all of local origin.

Victoria.

On an average, labour represents 60 to 65 % of the cost of works in connection with rivers and water supplies, settlement and roads and bridges. In the case of roads and bridges, however, labour charges may amount to as much as 80 % when the work is carried out for the relief of unemployment.

In the case of railway works, labour represents 50 to 70 % of the total cost according to circumstances, while in the case of forestry works it sometimes amounts to 95 %. Labour charges only enter into the cost of electrification works, however, to the extent of 25 to 35 %.

Austria.

The ratio between labour charges and the cost of materials is very different according to the category of the works. In the case of building and airport works, for example, each item accounts for approximately 50 % of the whole. As regards airports, however, this does not apply either to levelling works—expenditure on which goes almost entirely in labour charges—or to radio-electric installations, in the case of which materials represent much the heaviest item.

The cost of works on the Federal Railways and also on the buildings of the postal, telegraph and telephone administration is made up as to 55 % by labour charges. The other works of the latter administration, however, sometimes include a larger proportion for materials, rising to 60 % in the case of certain outdoor installations (cables) and to as much as 80 % in the case of certain indoor installations (amplification stations).

Expenditure on bridge-building and hydraulic works includes 60 % for wages; an additional 15 % of the cost of hydraulic works, moreover, is accounted for by the labour employed indirectly (manufacture of materials and transport), making a total of 75 %.

As regards work on the Federal roads, 70 % goes in wages in the case of rebuilding and only 40 % in surfacing.

The materials are almost all of local origin, with the exception of certain special materials employed in small quantities and necessarily imported, as they are not manufactured locally.

Belgium.

25 to 30 % of the cost of hydraulic works represents labour directly employed on the site. As materials and equipment, however, are almost entirely of Belgian manufacture, a further 50 % may be reckoned for labour employed indirectly, thus making a total of 80 %. The materials employed for the other categories of works are also largely of Belgian origin; as regards, however, operating a long-distance gas-supply works, a certain proportion of the materials are of foreign manufacture.

United Kingdom of Great Britain and Northern Ireland.

It is estimated that an expenditure of £1,000,000 provides employment for about one year for 4,000 men, including not merely those engaged actually on the work, but also those engaged on the provision of materials, transport, etc., in connection therewith.

Bulgaria.

20 to 23 % of the cost of public buildings represents labour, the remainder being spent on materials of local or foreign origin.

As regards the building of tramways, 20 % of the total represents labour, the materials being largely of foreign origin.

Chile.

The proportion varies greatly according to the nature of the works. Thus :

In the case of roads, it is estimated that 50 % of the cost is accounted for by wages, with another 5 % for social charges, the remainder representing the expenditure on materials, the great bulk of which is of home origin.

Labour (wages and social charges) represent 30 % in the case of bridges; the balance is spent on materials, a constantly increasing percentage of which is of home origin; the proportion of home-produced materials, indeed, now exceeds that of the materials obtained from abroad.

As regards hydraulic works, labour represents 20 to 25 %, most of the materials being of foreign origin.

The labour costs of buildings are estimated at 60 % of the whole.

Lastly, as regards the railways, labour and home-produced materials represent 70 %, the remaining 30 % being accounted for by materials of foreign origin.

China.

According to certain data regarding the hydraulic works (Yellow River), it is estimated that labour employed on the site accounts for approximately 40 % of the total costs, the percentage accounted for by expenditure on the preparation and delivery of building materials of home origin being slightly higher.

Plant and equipment, on the other hand, are generally imported.

Czechoslovakia.

In the case of road constructions, the average expenditure on wages is estimated at 60 %, and for road surface repairs 12 %, the remainder being spent on supplies of materials of Czechoslovak origin, and being therefore to a large extent devoted to indirect wages.

In the case of bridge construction, the proportion of wages is 33 %; for railway construction and agricultural improvement works, 60 %; for water-supply and sewers, 34 %; for inland waterways, ports, and hydraulic power, 60 % to 65 %; for electrification works, 19 %; and, lastly, for building, 50 to 60 %.

For all these works the material is chiefly of Czechoslovak origin.

Denmark.

In the case of railway works, the proportion spent on labour is, on an average, one-third of the total; in the case of hydraulic works, the proportion is 42 %, the remainder being spent on materials and equipment largely of home manufacture. In the case of certain harbour works, labour charges are estimated as representing 50 % of the whole.

Egypt.

Labour represents 25 % and materials 75 % of the expenditure on public works.

Estonia.

The proportion varies greatly, according to the category of the works and the particular undertaking within the category. The following examples will nevertheless convey an approximate idea of the ratio between labour charges and total expenditure:

In the case of roads and bridges and works on navigable waterways, 90 %; of agricultural improvements, 70 %; of railway works, building, telegraph and telephone installations, 50 %, etc.

Ethiopia.

The materials employed were partly of home origin and partly of foreign manufacture. Only home labour was employed. The unemployment problem, in the usual sense of the term, is unknown.

Finland.

In the case of building, it is estimated that wages account for approximately 48 % and, in the case of other works, for more than half of the total expenditure.

Materials are generally of home origin, apart from certain manufactured goods which are obtained from abroad.

France.

In the case of road works, it is estimated that, on an average, wages account for 50 % of the cost, allowance being made for the labour indirectly employed in supplying materials. The proportion represented by labour charges in the cost of works for the postal, telegraph and telephone services varies between 35 % and 60 %, according to the nature of the works.

Greece.

Labour accounts for 70 % of the expenditure on road and hydraulic works and 60 % of the cost of harbour extension works. The materials used in road works are of home origin, whereas the hydraulic works necessitate the importation of goods manufactured abroad.

Iraq.

The proportion varies greatly, according to the nature of the works. On an average, however, labour's share is 80 % to 85 % of the expenditure on roads, 35 % to 40 % of that on bridges, and 25 % of that on public buildings.

Part of the materials supplied are manufactured abroad.

Irish Free State.

The proportion varies according to the nature of the works. It is stated more particularly that :

In the case of normal road works, labour charges represent 75 % to 80 % of the total expenditure on roads without any special surface and 50 % of the expenditure on roads with a modern surface. Part of the materials and all the machinery are imported. In the case, however, of country-road works, contracts for small sections of which are awarded to farmers or labourers, the proportion accounted for by labour may be as high as 100 %.

In the case of land-improvement works, labour represents 90 % to 95 %, and 75 % in the case of land reclamation, the materials for both being of local origin.

In the case of hydraulic and reforestation works, labour accounts for 60 %.

In the case of water-supply and sewerage works, it amounts to approximately 50 % plus 5 % to 15 % in respect of labour employed indirectly in the manufacture and transport of the materials, all of which are of home origin.

In the case of buiding works, the share of labour is as high as 55 %, more than half the materials being of foreign origin.

Italy.

In the case of the works enumerated below, the percentage of expenditure represented by labour charges is as follows :

	%.
Road-building	44
Hydraulic works	53
Maritime works	24
Building works	23
Sanitary works and works of social importance.....	29
Railway building	10

Generally speaking, it is estimated that, on an average, labour accounts for 29 % of the total expenditure.

Latvia.

It is estimated that the expenditure on public works is, on an average, made up as follows :

10 % social charges; 5 % cost of materials and equipment, almost entirely of home manufacture; 10 % remuneration of intellectual workers; the remainder goes to labour in the form of wages.

Lithuania.

It is merely stated that foreign goods are not used for the purposes of public works.

Luxemburg.

It is estimated that labour accounts for one-third of the total expenditure on road works (apart from surfacing), bridges, water supplies and the abolition of level-crossings; in the case of road-surfacing and sewage disposal, labour's share is estimated at a quarter of the total expenditure, the balance representing the cost of materials and equipment.

New Zealand.

It is estimated that 50 % to 60 % of the expenditure on works of a constructional character is absorbed by labour charges, and 75 % in the case of maintenance works. In the case of aerodromes, the cost of labour employed direct, and that engaged indirectly in the manufacture of materials produced exclusively in New Zealand, amounts to 75 %.

Norway.

In the case of the construction of railway lines, wages amount to about 60 % of the total expenditure, and in the case of materials and equipment 20 %, the remainder being spent on administration and preparatory work,

In the case of road-construction, wages amount to from 70 % to 75 % of the aggregate cost, and in the case of works connected with inland waterways 80 %; in these two cases materials and equipment represent from 10 % to 12 %.

Moreover, as regards railway construction, social charges are stated to amount to 6 %.

The materials employed are essentially of Norwegian origin.

Poland.

The following average figures are given for the proportion of labour :

Fundamental improvements and correction of waterways, 73 %; work in harbours, 60 %; construction of dwellings, 54 %; roads and bridges, 30 % to 50 %; railway construction 35 % to 40 %; construction of public buildings, 33 %; water supply and water mains, 32 %; electrification works, 13 %; gas-supply works, 8 %.

Generally speaking, apart from certain special materials and equipment, the material employed was almost exclusively of Polish origin.

Portugal.

The estimated average proportion of labour is as follows :

Railway construction, 30 %; water-supply and sewage disposal, 30 % to 40 %; inland waterways, 75 %; public buildings, 40 %. In the case of the last-named, the material is almost exclusively of Portuguese origin. In harbour works, the materials are also of Portuguese origin, the equipment, on the other hand, being entirely of foreign manufacture.

Lastly, it is stated that, in works on the posts, telegraphs, and telephones, the proportion of expenditure on labour is 15 %, the remainder of the expenditure being on material, of which foreign material represents 60 % and home material 40 %. In the case of the installation of wireless stations, 14.5 % is given as the proportion spent on labour.

Sweden.

The distribution of the expenditure is very variable according to the nature of the work. It is estimated, however, that according to the various principal methods of carrying out public works, the proportion of wages to total expenditure is as follows :

For " anticipatory " Government works, 60 %; for " anticipatory " communal works, 40 %; for Government " reserve works ", 80 %; for State-subsidised communal " reserve works ", 68 %; and, lastly, for all works executed under open-market conditions, an average of 52 %.

The remainder of the expenditure relates to the supply of materials.

Switzerland.

For relief works, it is stated that the wages paid to unemployed persons occupied outside their calling amount, on the average, to 31.4 % of the total cost of the work.

As regards normal works, on the other hand, the proportion on an average is as follows :

Railway construction, labour : 43 % to 55 % according to the nature of the work; the remainder for materials.

In the case of work in ports, one-third represents wages, one-third cost of materials (including about 10 % of foreign origin), and one-third general, administrative and social costs.

As regards the construction of airports, the share of labour varies between 20 % and 90 %, according to the nature of the work; the remainder represents orders placed with industry, chiefly Swiss, but also in part foreign.

As regards the construction of public buildings, the share of labour represents one-third of the total costs, the remainder going to materials and equipment. The same proportion is indicated for work on telegraphs, telephones, and wireless stations.

United States of America.

In the early days of Government activity in the matter of public works, expenditure on materials was appreciably higher than that on labour, which on an average only amounted to 30 % to 40 %. It is, however, estimated that, when the whole of the Public Works Administration's programme has been carried out, about 50 % of the total expenditure will have gone directly for labour and about 50 % for materials and equipment.

Yugoslavia.

The share of labour in relation to total expenditure is estimated as follows :

For roads and bridges, 60 % to 70 %; harbours, 30 %; forestry work, 90 %; waterways conservancy, 85 %; hydro-technical works in general, 60 % to 80 %; building, 50 %; miscellaneous installations (water supply, sewers, telegraphic and telephonic installations, gas), from 25 % to 30 %.

The remainder of the expenditure is devoted to industrial materials and supplies, which are mostly of Yugoslav origin; supplies are, however, partly imported from abroad, particularly in the case of certain materials which are not produced in the country, and special installations which are supplied by foreign industry.

IV. GOVERNMENTS' OPINIONS WITH REGARD TO THE EFFECTS OBTAINED OR EXPECTED FROM THE EXECUTION OF PUBLIC WORKS ON THE RESUMPTION OF ECONOMIC AND INDUSTRIAL ACTIVITIES AND ON UNEMPLOYMENT.

Union of South Africa.

The Government has no doubt that the building programmes carried out by the Public Works Department have been very beneficial in easing the effects of the depression on artisans and the building trade generally. Still more favourable results are anticipated from the exceptionally large building programme decided upon in 1934, which will certainly help to restore confidence and trade and employment throughout the country.

Moreover, as regards land-settlement works, it is considered that they contribute to diminishing unemployment; the same applies to forestry and irrigation works. The former have contributed materially to a revival of industrial and economic activity and the latter are of vital importance to the future of the country from the point of view of the storage of water.

It is also anticipated that the anti-soil-erosion campaign will make farming less precarious and in many cases more profitable.

As regards railway construction work, it is considered that their utility, apart from their favourable influence on unemployment, consists in the creation of new facilities for transport answering to the economic necessities of the districts traversed or permitting of the development of certain commercial or industrial activities.

Lastly, as regards work in the mandated territory of South West Africa, it is observed that this work has absorbed the major portion of the unemployed of the territory and has permitted of the settlement of farmers.

Australia.

Commonwealth Works.

An economic and industrial revival due to the execution of certain works has been observed. Other works have exercised some influence on unemployment.

As regards the River Murray works in particular, apart from the favourable influence they have exercised on unemployment, it is believed that they will permit of the exploitation of vast areas and hence of the intensive economic development of large districts of the country which are at present held back by lack of water.

Works carried out by the Various States.

New South Wales.

As a consequence of the policy of public works and unemployment works followed by the Government, a material improvement has been observed in unemployment. Moreover, it is considered that the irrigation and water-supply works will permit of the intensive development of vast areas and the creation of numerous industries. The afforestation work, too, will facilitate the exploitation of the forests and will stabilise the forestry industry.

Road work is considered to be very valuable in creating wide possibilities of employment, both directly and indirectly, in numerous branches of national industry. Hence the loan funds assigned to these works are generally productive. Lastly, as regards agricultural improvement works, the majority have brought considerable economic advantages to the farms, while greatly contributing to a reduction of unemployment.

Queensland.

The Government considers that, by providing employment and restoring the purchasing power of the people, public works are an important factor in the endeavour to rehabilitate the financial position of the State.

Tasmania.

The effect of public works on unemployment is beneficial to an appreciable extent, but a far-reaching resumption of industrial activities is dependent on the extension of private enterprise.

South Australia.

The various works undertaken have contributed to reducing unemployment and to stimulating industrial activity on the one hand and creating the necessary means of transport on the other.

Western Australia.

The public works have resulted in several industries working at full pressure. This has made it possible, directly and indirectly, for a substantial number of unemployed to be reabsorbed in industry.

Victoria.

It is considered that the various public works have been very useful, both as regards their value from the economic and the industrial point of view and as important factors in providing employment. Electrification works have been particularly useful in providing industry with the necessary motive power.

Austria.

The works undertaken are considered in general to have had a favourable influence on unemployment and on economic and industrial activity in Austria, particularly the Federal road works, which, while giving direct employment to a large number of workers, are also of benefit to all other branches of economic activity; building, which gives

employment to labourers and contractors in the most varied branches; and hydraulic works, which, being distributed throughout the rural districts of the whole Federation, alleviate unemployment and the shortage of money among the population of those districts. The latter works are, further, of great value from the point of view of security and improvement of the soil, and at the same time represent productive investments.

Belgium.

The execution of public works on inland waterways has had a satisfactory effect on the economic and industrial depression and on unemployment.

Furthermore, as regards works in connection with electricity and long-distance gas supply, they are stated to have exercised some influence on the resumption of economic and industrial activities, particularly by providing initial construction work. As regards unemployment, the direct influence of the electricity works is unimportant, since these installations do not call for any considerable supply of labour. As regards the supply of gas, it is stated that the influence on unemployment has in some cases been offset by the dismissal of workmen in gasworks which are no longer used.

United Kingdom of Great Britain and Northern Ireland.

The Government considers that, in the execution of public works, the amount of employment provided cannot be the paramount consideration; the ultimate test of the work must be its social or economic value. Experience in recent years in the United Kingdom has shown that the stimulation of special works selected primarily in respect of their employment-providing capacity has an effect on the employment position which is small relative to the heavy expenditure incurred, and the works, when completed, leave burdens on national and local finances which impede the recovery of normal activity.

The Government adds that, on a number of occasions, it has stated its view that the expansion of normal activity will most surely and rapidly be brought about by the creation of confidence by steady policy—in particular, financial confidence by a balanced budget, the lowering of rates of interest with resultant cheap and plentiful capital, and, in so far as Government action is possible, by the creation of facilities for, and the removal of hindrances to, trade.

His Majesty's Government therefore thinks that public works are part of the normal activities of the State and of local public authorities and they are continuing, and will continue, in the United Kingdom, subject to the test of their value to the community; but the experiment of large-scale public works as a method of dealing with unemployment has been tried and has failed and it is not intended to repeat it.

Bulgaria.

Public works are stated to have provided considerable opportunities of employment. Nevertheless, if the Administration had at its disposal the funds necessary for carrying out its public works programme within a shorter period, their influence on the reduction of unemployment would be still greater.

Canada.

It is believed that the execution of public works has stimulated economic and industrial activity and has been an important factor in relieving unemployment in Canada.

Chile.

Although the progress of the works has had to be slowed down and partly suspended owing to the Treasury crisis, and in these circumstances the economic return was sacrificed, it is considered that their partial execution was nevertheless of material assistance in solving the problem of unemployment and that it also had a direct influence on the activity of certain industries, an appreciable recovery having taken place.

Railway construction work, in particular, has not always been undertaken with a view to immediate commercial results; the main object in view was to promote agriculture and mining and to open up communications between remote parts of the country.

China.

As regards hydraulic works in general, they make it possible, particularly by protection against floods and by drainage, to reclaim for agriculture large areas of land, and also to improve considerably, mainly by irrigation, the yield of land already cultivable but suffering from drought. Further, in certain cases, an extension of trade and industry is anticipated as a result of the development of inland waterways and hydraulic power.

Lastly, these various works provide opportunities of employment for a very large number of labourers. This is particularly important in the case of flood prevention works, which, besides providing protection for agriculture over vast areas, make it possible to rescue from famine vast numbers of workers, particularly refugees from the flooded areas.

Czechoslovakia.

Road works are important, not only from the standpoint of national economy and public utility, but also as a factor in relieving unemployment. In particular, roads with a modern surface have indirectly given employment to a very large number of persons.

Capital investment in State railway works has a great bearing on the solution of the present economic depression. It is considered, however, that only such works as will in future prove profitable should be undertaken.

Agricultural improvement works are also regarded as one of the best ways of combating unemployment, since they are scattered throughout the country and, moreover, represent a source of increased revenue.

The provision of drinking-water supplies and sewage disposal are likewise considered to be a very effective means of combating unemployment, as the work is carried out in the towns where unemployment is usually most acute. It also has a beneficial effect from the health standpoint.

Lastly, works in connection with inland waterways, ports and hydraulic power are also found to be very effective in stimulating economic and industrial activity and relieving unemployment.

Denmark.

Certain works have helped to reduce unemployment among ordinary workers, but have had less effect on employment in industry.

At the same time, communications have been improved by some of the works undertaken, and large areas of land have been reclaimed for cultivation by means of others.

Egypt.

The hydraulic works, and particularly those connected with the construction of reservoirs for the storage of water, exercise a good influence on agriculture by restoring to cultivation vast areas of land by means of irrigation and drainage, and by improving other land which is already cultivable. It is also stated that these works have raised the cost of labour. Had these schemes not been carried out a large number of local industries would have come to a standstill.

Ethiopia.

The effect of public works has been favourable and a continuous improvement in economic activity has been observed. Certain important improvements in the communications of the country have been carried out.

Finland.

It is difficult to estimate exactly the part played by public works in the re-establishment of economic and industrial conditions, which is chiefly due to the liberal economic policy of the Government. Nevertheless, the execution of public works has directly and indirectly contributed largely towards reducing unemployment during the period of crisis.

France.

The Ministry of Public Works states at the end of its report that important public works can only be regarded as a temporary palliative for unemployment.

The Ministry of Posts, Telegraphs and Telephones considers, moreover, that these works have contributed to the maintenance of economic activity and have assisted the development of certain industries, particularly as a result of orders for materials. Nevertheless, this is a specific programme of equipment which cannot be repeated, and, once it has been completed, the work in question will exercise no beneficial influence on the economic situation.

Lastly, it is considered that rural equipment works, apart from their favourable influence on unemployment, contribute towards an improvement in conditions of life in the countryside and towards the development of public wealth.

Greece.

The execution of road-building works is likely to improve communications and to stimulate agriculture by diminishing transport costs; it will also have a beneficial influence on unemployment and on commerce and industry in general. Equally favourable results are hoped for from the hydraulic works by which very large areas will be made available for agriculture.

India.

Stress is laid on the importance of certain works which provide communications for districts hitherto not supplied with them, increase the existing traffic facilities, restore to cultivation wide areas of land and improve its yield, procure the motive power necessary for the different parts of the country, or improve the sanitary conditions of the population.

Iraq.

In the case of certain works, it is stated that they have been useful to the population, particularly those helping to protect it, as well as large areas of land, against floods, or to improve the yield of agriculture over wide districts.

Irish Free State.

The road improvement, agricultural reclamation and afforestation works are giving satisfactory results, both from the general point of view of national economic development and more particularly as regards the campaign against unemployment, owing to the opportunities of employment created especially for the rural population.

As regards building works, particularly the construction of dwellings for the population, and water-supply and drainage work, they are of great social and sanitary value and create employment for various national industries, to which they give an opportunity of development. As regards the construction of dwelling-houses in particular, it checks the migration of rural workers towards the town.

Italy.

The policy pursued in respect of public works provided specially with a view to diminishing unemployment has greatly attenuated the effects of the depression in Italy. The development of public works has improved the economic situation of numerous industries, and the national economy has benefited appreciably thereby.

Latvia.

A favourable influence is exercised on unemployment by the erection of dwelling-houses for unemployed agricultural workers with the object of encouraging the migration of unemployed urban workers to the country.

Lithuania.

It is considered that, apart from diminishing unemployment, certain of the works carried out are of great value to the country.

Luxemburg.

It has been found that the works have greatly contributed to reducing unemployment by providing work for quarrymen and various industrial workers.

Netherlands.

Public works to counteract unemployment will be of permanent value in improving the nation's economic equipment. Large stretches of land have been brought under cultivation, while others have been improved. Employment has been provided for a large number of persons, and the works have had a favourable effect on certain industries.

New Zealand.

Road works have promoted industrial development in many parts of the country, and also land cultivation. They have likewise led to an improvement in the agricultural situation in general. These works have also stimulated trade. Lastly, they have provided employment directly or indirectly for a large number of persons.

Irrigation and land-improvement works have brought under cultivation and rendered fertile considerable stretches of land, and have enabled a large number of new farms to be established.

On the other hand, harbour works have had no direct effect on the resumption of economic activity and very little influence on unemployment; moreover, work at airports has had no effect—or only a temporary effect—on unemployment.

Norway.

Public works are, it is thought, producing satisfactory results both directly by increasing employment and indirectly by the consequences thereby brought about. In particular, the establishment of communications in distant parts of the country has led to an improvement in their economic conditions, agricultural development, and also to an influx of settlers.

Poland.

Works on roads and bridges have not only helped to combat unemployment, but have likewise promoted the economic and industrial expansion of parts of the country which hitherto lacked adequate means of communication, and also the development of motor traffic.

It is also considered that, apart from their influence on unemployment, the railway works have met urgent economic requirements.

Lastly, work on inland waterways has indirectly had a beneficial effect on the economic development of the country by protecting and improving large areas.

Portugal.

Hydraulic works and the construction of public buildings have provided employment for a large number of persons, and have thus helped to mitigate unemployment.

Sweden.

By carrying out public works the authorities have endeavoured to procure employment for a large number of unemployed, and also to combat unemployment indirectly by improving economic conditions and thus paving the way for a trade revival, particularly by increasing purchasing power.

The effect of the execution of the works has been both directly and indirectly to reduce considerably the number of unemployed. This applies both to State and communal "reserve works", and to work carried out under open-market conditions, the latter including constructional works. These works are therefore considered to have played an important part in bringing about an improvement of the situation as regards unemployment.

Switzerland.

By carrying out various works and particularly by co-ordinating activities relating to public works, the authorities have given employment to a large number of persons who would otherwise be unemployed.

The railway works have led to the placing of large orders, and have thus helped to a great extent to give work to the country. Owing, however, to the effects of the depression, the extent of these works has had to be limited.

The port works have also given employment to various undertakings and factories and the facilities granted have been of great advantage to the trade and industry of the country.

Lastly, as regards relief works in particular, these have only provided work for a small number of persons but have had a greater influence on the unemployment situation, owing to the system of rotation by which work is given to the unemployed. These works have also indirectly stimulated the economic life of the country in general.

United States of America.

Although it would appear to be impossible to attribute any definite proportion of the general results to the influence of public works alone, since they only form part of the reconstruction programme set on foot in 1933, it is nevertheless considered that the general programme has manifestly had the effect of halting the downward sweep of the depression and has increased business activity and considerably reduced the numbers of the unemployed, which are in constant diminution. At the same time, there has been an increase in purchasing power, which in its turn has had favourable effects on economic and industrial activity. Lastly, there has been a considerable increase in collections both of Federal and local revenue.

It is hoped that these favourable effects will be further enhanced in the future, particularly by the execution of certain important works undertaken with the help of Federal funds for the purpose of organising and co-ordinating the development and conservation of the country's resources.

Yugoslavia.

The greater part of the work is carried out by local labour in order to relieve unemployment and the economic depression to some extent.

Railway works, in particular, are considered to have brought about a decrease in unemployment. On the other hand, harbour works are not thought to have had a very great influence either on economic and industrial activity or on unemployment.

Forestry works have done much to reduce unemployment, particularly as they are carried out in poor parts of the country where most of the workers are peasants who do not possess enough cultivable land and are obliged to look for subsidiary employment. By means of reafforestation, areas that were formerly barren have been made economically productive.

Lastly, waterways conservancy works are found to be of great importance for the well-being of the inhabitants and the agricultural and economic recovery of the country. Moreover, during a period of unemployment, these works meet the primary requirements of the population in poor mountainous districts by providing work.

ANNEX.

QUESTIONNAIRE SENT TO THE GOVERNMENTS.

I. A brief description of the main public works :

- (a) Undertaken since the beginning of the year 1929 and now completed;
- (b) Now in course of execution;
- (c) The execution of which is at present in contemplation or schemes for which are in preparation.

The term "public works" is intended to include the various categories of work mentioned in the list annexed to the present circular, and the public works described should, as far as possible, be classified according to the categories shown in that list.

II. The principal administrative methods followed or contemplated for the execution of the work referred to in I, and any legal provisions relating to such work.

(Has the work in question been carried out, or is it being, or to be, carried out on behalf of or by the order of a central, regional or local or other authority, or on behalf of a company holding a concession from public services, or on behalf of private persons receiving a grant from the public authorities? Is such work being carried out directly by the authorities, or by contract, etc.?)

III. The principal methods employed for financing such work.

(Is the expenditure on the work charged to the ordinary or the extraordinary budget of the State, the budget of regional or local administrations, the budgets of public bodies, etc., or is it financed by an internal or external loan? Security of such loans; plans of repayment, etc.)

IV. An estimate, as far as is possible, of the allocation of expenditure on the execution of the public works referred to in I, as between materials and equipment provided by national or foreign industries, on the one hand, and labour—that is to say, wages and miscellaneous social expenditure—on the other.

V. The Government's opinion with regard to the effects obtained or expected from the execution of the public works referred to in I on the resumption of economic and industrial activities and on unemployment.

CLASSIFICATION OF PUBLIC WORKS BY CATEGORIES.

- (a) Roads and bridges.
- (b) Railway lines, including tramways, metropolitan railways. etc. (If possible, mention the more important construction works separately.)
- (c) Complete agricultural land reclamation (drainage, irrigation, construction of dwelling-houses and various new buildings, or establishment of entire new settlements, country roads and other works connected with land settlement).

(d) Canals and other inland waterways (including improvement work on rivers, defensive work against floods, etc.). (Work not already included under (c).)

(e) Land-improvement work, bringing of new land under cultivation, reforestation, etc. (Work not already included under (c).)

(f) Provision of drinking-water supplies and sewage disposal. (Work not already included under (c).)

(g) Work carried out in sea and river ports, including mechanical equipment of such ports.

(h) Work for the establishment of airports.

(i) Building and construction work forming part of a general plan and carried out (or to be carried out) with the participation or approval of public authorities, classified according to category (administrative buildings, dwelling-houses, etc.). (Work not already included under (c).)

(j) Electric installations, hydro-electric and heating power centres, motive power transmission.

(k) Gasworks and long-distance gas supply.

(l) Telegraph and telephone installations, wireless broadcasting stations.

(m) Other work.